UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

69316 7590 02/23/2010
MICROSOFT CORPORATION
ONE MICROSOFT WAY
REDMOND, WA 98052

EXAMINER
YEN, ERIC L
ART UNIT PAPER NUMBER
2626

DATE MAILED: 02/23/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/613,631	07/03/2003	Kuansan Wang	M61.12-0521	4356	

ADDIN TYPE SMALL ENTRY ISSUE BEFORE DURING PRINCIPLE POR PAID ISSUE BEFORE THYPAL BEES, DURING THE DATE D

TITLE OF INVENTION: COMBINING USE OF A STEPWISE MARKUP LANGUAGE AND AN OBJECT ORIENTED DEVELOPMENT TOOL

 APPLN TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEE(s) DUE
 DATE DUE

 nonprovisional
 NO
 \$1510
 \$300
 \$0
 \$1810
 05/24/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notifical	form should be used to correspondence including d below or directed off tions	or transmitt ig the Paten icrwise in B	ing the ISSU t, advance of lock 1, by (a	JE FEE and PUBLICA' rders and notification of a) specifying a new corr	f ma resp	ON FEE (if requir aintenance fees wi ondence address;	ed). B ill be i and/or	locks 1 through 5 st nailed to the current (b) indicating a sepa	tould be corresport rate "FEI	completed where ndence address as E ADDRESS" for	
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Fe	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.						
69316 MICROSOFT ONE MICROSO REDMOND, W.		/2010		11	bere	Cert	ificate	of Mailing or Trans:) Transmittal is being ficient postage for firs (SSUE FEE address () 273-2885, on the d	denovite	d with the United ail in an envelope r being facsimile ted below.	
										(Depositor's name)	
										(Signature)	
				L						(Date)	
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTO	OR		ATTO	RNEY DOCKET NO.	CONFI	RMATION NO.	
10/613,631	07/03/2003			Kuansan Wang		M61.I2-0521				4356	
TITLE OF INVENTION					_						
APPLN, TYPE	SMALL ENTITY		EE DUE	PUBLICATION FEE DUI	Е.	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE		DATE DUE	
nonprovisional	NO	SI	510	\$300	_	\$0		\$1810		05/24/2010	
EXAM	INER	ART	UNIT	CLASS-SUBCLASS	╛						
YEN, E			526	704-275000							
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT. ess an assignce is ident h in 37 CFR 3.11. Comp	nge of Corre "Indication ed. Use of a	espondence form Customer	2. For printing on the (I) the names of up or agents OR, alterna (2) the name of a sin registered attorney or 2 registered patent at listed, no name will t THE PATENT (print or t data will appear on the T a substitute for filing a (B) RESIDENCE: (CTI	to 3 attive agle or ag ttorn be p type type pat an as	8 registered patent ely, firm (having as a ent) and the name eys or agents. If n rinted.	members of uponam	er a 2	xument	has been filed for	
Please check the appropriate 4a. The following fee(s):		categories (inted on the patent):	_			on or other private gro			
☐ Issue Fee	o small entity discount j	permitted)	_	A check is enclosed Payment by credit c The Director is herel overpayment, to Dep	d. card. eby a	Form PTO-2038	is atta	ched. equired fee(s), any de	ficiency.		
	s SMALL ENTITY state	is. See 37 Cl		☐ b. Applicant is no lo							
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will ne tes Patent an	ot be accepte nd Trademark	d from anyone other than Office.	n the	e applicant; a regis	tered a	ttorney or agent; or th	e assigne	e or other party in	
Authorized Signature						Date					
Typed or printed name				Registration No							
This collection of inform an application. Confident submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C tiality is governed by 35 I application form to the ons for reducing this bu irginia 22313-1450. DC 13-1450.	FR 1.311. T U.S.C. 122 USPTO. Ti rden, should D NOT SENI	he information and 37 CFR ime will vary be sent to the D FEES OR	on is required to obtain or 1.14. This collection is of depending upon the indee Chief Information Offi COMPLETED FORMS	or ret estir divid ficer, TO	tain a benefit by th mated to take 12 m dual case. Any cor , U.S. Patent and 1 THIS ADDRESS.	e publ inutes nment: Tradem SENI	ic which is to file (and to complete, includin s on the amount of tir ark Office, U.S. Depo O TO: Commissioner	by the U g gatheri ne you re artment of or Patent	sPTO to process) ng, preparing, and quire to complete f Commerce, P.O. ts, P.O. Box 1450,	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/613,631	07/03/2003	Kuansan Wang	M61.12-0521	4356		
69316 7	590 02/23/2010		EXAMINER			
MICROSOFT C	ORPORATION	YEN, ERIC L				
ONE MICROSOFT WAY			ART UNIT	PAPER NUMBER		
REDMOND, WA	98052	2626				

DATE MAILED: 02/23/2010

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 734 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 734 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/613 631 WANG, KUANSAN Notice of Allowability Examiner Art Unit FRIC YEN 2626 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to Amendment filed 11/16/09. The allowed claim(s) is/are 1,6-9,11-14,16-29,33,34 and 36-38. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other .

Page 2

Application/Control Number: 10/613,631

Art Unit: 2626

DETAILED ACTION

Response to Amendment

 In response to the Office Action mailed 9/23/09, applicant has submitted an amendment filed 11/16/09.

Claims 1, 8, 11, 12, 19, 22-24, 27, 34, 36, have been amended.

Allowable Subject Matter

- 1. Claims 1, 6-9, 11-14, 16-29, 33-34, and 36-38, are allowed.
- The following is an examiner's statement of reasons for allowance:

The prior art of record generally teaches the different functions independent claims 1, 19, and 27, but does not teach the specific distribution of the functions between the SALT module and VoiceXML module and the interaction between the SALT module and VoiceXML module.

Williams et al. (US 2003/0212561) teaches programming IVR systems using both VXML/VoiceXML and SALT (paragraph 15).

As stated by applicant, Williams only mentions that VoiceXML and SALT are programming languages used in IVR systems (Amendment, page 10)

As per Claim 1, since Williams only generally teaches where VoiceXML and SALT are used in an IVR system ("computer to process information"), Williams does not teach or reasonably suggest that the VoiceXML module declares a field and a second field and where the SALT module obtains a recognition result from an initialized

Art Unit: 2626

recognition event with a plurality of associated grammars and associates a first portion of a recognition RESULT with a first grammar of the plurality of grammars to complete the first field declared by the VoiceXML module and associates a second portion of the recognition RESULT with a second grammar of the plurality of grammars to complete the second field.

Williams teaches using VoiceXML and SALT to implement a dialog with a corresponding call flow ("branching voice queries... caller responds with button pushes... or voice responses", paragraph 5; "call flow", paragraphs 10-11; "call flow", paragraphs 73-76; where dialog systems usually involve a window for listening to the user's response after a particular prompt is played to the user). Dialogs conducted with users necessarily include obtaining a recognition result from a speech recognition process (event) in order to determine exactly what the user is saying and to process the input properly. A dialog and call flow also necessarily has a sequence of prompts that the machine/IVR uses to communicate with the user. Since the prompts are delivered in a sequence, there is something in the VXML/SALT information that determines the order of outputting the prompts, in addition to telling the system to recognize speech and perform other functions.

Therefore, Williams teaches/suggests, by teaching a VXML/SALT IVR system, a VoiceXML module executing form interpretation and establishing an interactive dialogue with a user including instructions associated with dialog events including recognition/prompting/messaging which are executed in a defined order and since the system decides which prompt to present after a particular event without interference

Art Unit: 2626

from a user, it automatically advances from one instruction to another instruction in a defined order. Williams also teaches/suggests a SALT module including temporal triggers. Applicant defines in the Specification that a "temporal trigger" "may include various events such as an error, exception, receipt of a message, recognition and/or no recognition or combinations thereof" (page 6, lines 13-25) and "may be triggered using a listen tag that includes one or more grammar elements" (page 24, lines 7-28). Therefore, by teaching a dialogue with a call flow which includes prompts being output to the user to obtain user speech, and recognizing user speech (e.g., Williams, Figure 7), Williams teaches temporal triggers that initialize speech recognition events that obtain recognition results. Williams suggests the portions of the claimed SALT module because, in an IVR system that uses VXML and/or SALT, the designer of the markup language document could opt to encode a portion of the functions using SALT and another portion using VXML.

Williams, however, fails to teach declaring first and second fields and distributing the portions of the recognition result to the first and second fields <u>by associating the portions</u> of the <u>recognition RESULT</u> with the <u>GRAMMARS</u> belonging to the first and second fields (i.e., a first grammar for the first field and a second grammar for a second field).

Aust et al. (US 5,860,059) teaches associating portions of a recognition result with a corresponding field (Figures 2A-2P; col. 3, lines 26-54; e.g., the system parses the user's answer to the question "from where to where do you want to travel" to fill a

Art Unit: 2626

date field and a departure location [two distinct fields] with the different parts of "today from Aachen").

Aust, however, does not teach where matching the recognition result with the field is done by associating the <u>result</u> with a <u>grammar</u> of the field. In Aust, the recognition result is directly associated with the field without involving the grammars, since the grammars were <u>already</u> used to obtain the recognition result (i.e., the <u>speech</u> is associated with the <u>grammar</u> to produce the <u>result</u> but the <u>result</u> is not associated with a grammar for a field).

Gong et al. (US 2004/0006474) teaches (Figures 17, 21, and 25, paragraph 245; paragraph 251) describes a VXML interface including a city grammar, a state grammar and a street grammar (paragraph 251). Since each of the city/state/street grammars can include Washington (Washington St./Washington DC/Washington state), this suggests that the system should associate an input of Washington with a particular grammar to determine if it is a city, a state, or a street.

However, Gong resolves this by making only one grammar active at a given time (paragraphs 255-256). Since the recognition result is obtained from a particular grammar, there is no need to associate the <u>result</u> with the <u>grammar</u>.

Even associating the recognition result with the grammar is obvious, the prior art of record does not specifically teach that the SALT portion of a markup language document, particularly, accomplishes these steps. Williams suggests that the feature <u>could</u> be implemented in SALT but there is no apparent reason for one of ordinary skill in the art to do so without employing impermissible hindsight (Amendment, page 10)

Art Unit: 2626

Therefore, the prior art of record does not teach associating portions of the recognition result with a particular grammar to complete one of the fields declared by the VoiceXML module, where this association, along with the other claimed functions of the SALT module, is performed by the SALT module, in combination with the remaining limitations in Claim 1 (including the assigned tasks of the VoiceXML module).

As per Claim 19, Williams and Aust teach/suggest performing speech recognition events, prompting events, etc., in a dialog to fill declared fields using a VXML/SALT IVR system, where voice markup language documents are processed in the order that the instructions in the document are written in to produce the dialog, which includes recognition and prompting, as discussed above regarding Claim 1. The inherent features of processing voice markup language documents involve automatically advancing/moving through an ordered list of instructions and performing functions based on the markup language tags and other command strings in the voice markup language document, which are claimed in Claim 1.

Aust further suggests looping through the VoiceXML executable instructions in a defined order until the first and second VoiceXML field shave been filled by the user because Aust teaches continuously prompting for missing information depending on what the user says and what the system still needs to know to complete a transaction (i.e., ask for the missing destination, time, etc.) (Figures 2A-2P; col. 3, lines 26-54).

Taylor (US 6,922,411) teaches looping through VXML instructions (col. 16-17.

Table 6A; especially col. 17, "a looping structure so that vxml elements can be repeated

Art Unit: 2626

...before timing out") in order to ensure input (i.e., ensure that a field is filled) where the field in Taylor is whatever memory location is used to contain the user's speech. The loop also for controlling prompting events because Taylor teaches playing an audio prompt X times.

Loops and interrupts in programmed source codes are also well-known in the art. It is also well-known that markup language parsers read through markup language documents in some form of sequence and encounter markup language tags and perform a function associated with an encountered tag (e.g., performing some sort of display in response to detecting an <HTML> tag). The interrupting of a loop through a markup language document and automatically advancing/moving to a subsequent instruction in a defined order is not new and/or is obvious.

The prior art of record, however, does not teach/suggest that the SALT module specifically handles the speech recognition events while the VoiceXML module handles the prompting events and declares VoiceXML fields (instead of, for example, having the SALT tags declare fields or using some other markup language to declare fields). Even though one of ordinary skill in the art could design a voice markup language document using a combination of SALT and VoiceXML/VXML (where Williams teaches combining SALT and VoiceXML in a voice markup language system), there is no apparent reason for one of ordinary skill in the art to require the SALT and VoiceXML modules to perform their respective functions as defined in Claim 19 without employing impermissible hindsight (Amendment, page 10). Applicant's claim 19 is a species and/or an element

Art Unit: 2626

of the broader genus of SALT/VXML documents described in Williams because it specifically defines the functions performed by the SALT module and the VXML module.

As per Claim 27, Williams and Aust, as discussed above, teach/suggest the use of voice markup language documents with SALT and VoiceXML, which contain sequentially ordered operations/instructions for conducting a dialog (including recognition and prompting), and also where the dialog fills in fields corresponding to inputs.

Zou et al. (US 6,246,983) further teaches multi-modal inputs using DTMF and voice (col. 3, line 51 – col. 4, line 3).

Chaves (US 6,510,414) teaches where the grammar of the recognition system can recognize both DTMF signals and speech (col. 4, line 65 - col. 5, line 10) which implies that an input can include <u>both</u> DTMF signals and speech

Chang et al. (US 2003/0149565) teaches parsing an input which can include DTMF signals and/or spoken sounds (paragraph 9) in the context of a location system ("Mapquest server", paragraph 155) which implies a set of fields such as ZIP codes, street names, city names, etc. (paragraphs 153-154). This suggests dividing/parsing a DTMF/Speech combination input including a DTMF ZIP code and spoken street/city name to fill a city/street and ZIP code field because there is less risk of erroneous recognition to enter a ZIP code manually and it is much more tedious to enter a city/street name by hand as opposed to speaking it. It also logically follows that the system would fill a ZIP code field with a DTMF ZIP code and the city/street name field

Art Unit: 2626

with a spoken city/street name because to do anything else would constitute an error (i.e., the different components of the input are put where they are supposed to be).

Brotman et al. (US 2001/0049599) teaches where ZIP codes and other numerical data are entered using DTMF codes (paragraph 10).

However, similar to the reasoning discussed above regarding claims 1 and 19, the prior art of record does not teach or reasonably suggest where associating a spoken portion of an input with one field, and where a DTMF portion of an input is associated with a second field, is <u>performed by a SALT module</u>, where the fields are <u>declared by the VoiceXML module</u>, and where the SALT and VoiceXML modules perform the other functions assigned to them in Claim 27.

Even though one of ordinary skill in the art could design a voice markup language document using a combination of SALT and VoiceXML/VXML (where Williams teaches combining SALT and VoiceXML in a voice markup language system), there is no apparent reason for one of ordinary skill in the art to do so without employing impermissible hindsight (Amendment, page 10)

In summary, the actual method steps of claims 1, 19, and 27, are not new or nonobvious but the prior art of record does not teach or suggest the combinations where these method steps are distributed between the SALT module and VoiceXML module in the manner defined in Claims 1, 19, and 27. Art Unit: 2626

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC YEN whose telephone number is (571)272-4249. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/613,631 Page 11

Art Unit: 2626

EY 2/13/10

/Richemond Dorvil/ Supervisory Patent Examiner, Art Unit 2626